**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A method of synchronizing a contraction of ventricular wall locations, the method comprising the steps of:

sensing motion with a first accelerometer located at a first ventricular wall location to produce a first signal;

sensing motion with a second accelerometer located at a second ventricular wall location to produce a second signal;

comparing the first signal to the second signal to detect a difference in synchronization of the first ventricular wall contraction and the second ventricular wall contraction; and

determining, based on the detected difference in synchronization of the first ventricular wall contraction and the second ventricular wall contraction, at least one parameter for a stimulation pulse to be applied by an electrode.

2. (Previously Presented) The method of claim 1, further comprising the steps of:

applying the stimulation pulse to the first ventricular wall location via the electrode located at the first ventricular wall location in order to alter the first ventricular wall location contraction.

3. (Original) The method of claim 2, further comprising the steps of:

sensing motion with the first accelerometer and the second accelerometer while applying the stimulation pulse with the parameter to again detect the difference;

when an absolute value of the difference is less than or equal to a threshold, continuing application of the stimulation pulse with the parameter; and

when the absolute value of the difference is greater than the threshold, altering the parameter of the stimulation pulse.

4. (Original) The method of claim 3, wherein the detected difference is a phase difference between the first signal and the second signal, and the threshold is non-zero.

5. (Original) The method of claim 3, wherein altering the parameter comprises the step of:

comparing the difference detected prior to application of the stimulation pulse with the parameter to the difference detected during application of the stimulation pulse with the parameter.

6. (Original) The method of claim 2, wherein the parameter includes a timing of the stimulation pulse relative to atrial activity.

7. (Original) The method of claim 2, wherein the parameter includes a timing of the stimulation pulse relative to a timing of a second stimulation pulse.

8. (Original) The method of claim 7, wherein the second stimulation pulse is provided to the electrode located at the second ventricular wall location.

9. (Original) The method of claim 2, wherein the first accelerometer is located within an electrode lead associated with the electrode located at the first ventricular wall location.

10. (Original) The method of claim 9, wherein the electrode lead is located within a coronary sinus vein.

11. (Original) The method of claim 1 wherein the comparing step comprises detecting a phase difference by comparing a time of an onset of contraction indicated by the first signal with a time of an onset of contraction indicated by the second signal.

12. (Original) The method of claim 1, wherein the comparing step comprises detecting a phase difference by comparing a time of a peak of contraction indicated by the first signal with a time of a peak of contraction indicated by the second signal.

13. (Original) The method of claim 1, wherein the comparing step comprises detecting an amplitude difference.

14. (Original) The method of claim 1, wherein the comparing step comprises detecting an amplitude difference and a phase difference.

15. (Original) The method of claim 1, wherein the motion associated with the first signal and the second signal is sensed continuously during consecutive cardiac cycles.

16. (Previously Presented) The method of claim 1, wherein the contraction of a first free wall and a second anterior wall is stimulated.

17. (Original) The method of claim 1, wherein sensing and comparing the first and second signals is performed by an implantable device.

18. (Original) The method of claim 1, wherein the first ventricular wall location is at a free wall of a left ventricle and the second ventricular wall location is an anterior wall of the left ventricle.

19. (Original) The method of claim 18, wherein the anterior wall comprises the septum between the left ventricle and a right ventricle.

20. (Original) The method of claim 1, wherein the first ventricular wall location is an anterior wall of a right ventricle and the second ventricular location is a free wall of the right ventricle.

21. (Original) The method of claim 20, wherein the anterior wall comprises the septum between the right ventricle and a left ventricle.

22. (Original) The method of claim 1, wherein the first ventricular wall location is a free wall of a left ventricle and wherein the second ventricular wall location is a free wall of a right ventricle.

23. (Original) The method of claim 1, further comprising the steps of:

sensing motion with a third accelerometer located at a third ventricular wall location to produce a third signal; and

comparing the third signal to the first signal or the second signal to detect a difference in synchronization of the third ventricular wall contraction and the first or second ventricular wall contraction.

24. (Original) The method of claim 23, wherein the third ventricular wall location is an anterior wall located between a right ventricle free wall and a left ventricle free wall.

25. (Previously Presented) The method of claim 23, further comprising the steps of:

determining, based on the detected difference between the third signal and the first or second signal, a parameter for a second stimulation pulse to be applied by an electrode located at the third ventricular wall location; and

applying the second stimulation pulse to the third wall location.

26. (Previously Presented) The method of claim 1 wherein the electrode is located at the first ventricular wall location to alter the first ventricular wall location contraction, the method further comprising:

determining, based on the detected difference, at least one parameter for a second stimulation pulse to be applied by an electrode located at the second ventricular wall location to alter the second ventricular wall location contraction; and

applying the first stimulation pulse to the first ventricular wall location and the second stimulation pulse to the second ventricular wall location.

27. (Previously Presented) A device for synchronizing a contraction of ventricular wall locations, comprising:

a first accelerometer configured to be located at a first ventricular wall location;

a second accelerometer configured to be located at a second ventricular wall location;

a processing module that compares a first signal produced by motion of the first accelerometer when at the first ventricular wall location to a second signal produced by motion of the second accelerometer when at the second ventricular wall location to detect a difference in synchronization of the first ventricular wall location contraction and the second ventricular wall location contraction; and

an output module;

wherein the processing module is further configured to determine, based on the detected difference, a parameter for a stimulation pulse, and wherein the output module is configured to apply the stimulation pulse to an electrode.

28. (Previously Presented) The device of claim 27, wherein the electrode is located at the first ventricular wall location to alter the first ventricular wall location contraction.

29. (Original) The device of claim 28, wherein the processing module is further configured to sense motion with the first accelerometer and the second accelerometer while the output module applies the stimulation pulse with the parameter to again detect the difference, the output module being further configured to continue application of the stimulation pulse with the parameter when an absolute value of the detected difference is less than or equal to a threshold and apply the stimulation pulse after alteration of the parameter by the processing module when the absolute value of the difference is greater than the threshold.

30. (Original) The device of claim 29, wherein the detected difference is a phase difference between the first signal and the second signal, and the threshold is non-zero.

31. (Original) The device of claim 29, wherein the processing module is configured to alter the parameter by comparing the difference detected prior to application of the stimulation pulse with the parameter to the difference detected during application of the stimulation pulse with the parameter.

32. (Original) The device of claim 28, wherein the parameter includes a timing of the stimulation pulse relative to atrial activity.

33. (Original) The device of claim 28, wherein the parameter includes a timing of the stimulation pulse relative to a timing of a second stimulation pulse.

34. (Original) The device of claim 33, wherein the output module provides the second stimulation pulse to the electrode located at the second ventricular wall location.

35. (Original) The device of claim 28, wherein the first accelerometer is located within an electrode lead associated with the electrode located at the first ventricular wall location.

36. (Original) The device of claim 35, wherein the electrode lead is located within a coronary sinus vein.

37. (Original) The device of claim 27, wherein the detected difference is a phase difference detected by the processing module comparing a time of an onset of contraction indicated by the first signal with a time of an onset of contraction indicated by the second signal.

38. (Original) The device of claim 27, wherein the detected difference is a phase difference detected by the processing module comparing a time of a peak of contraction

indicated by the first signal with a time of a peak of contraction indicated by the second signal.

39. (Original) The device of claim 27, wherein the detected difference is an amplitude difference.

40. (Original) The device of claim 27, wherein the detected difference is based on an amplitude difference and a phase difference.

41. (Original) The device of claim 27, wherein the motion associated with the first signal and the second signal is sensed continuously during consecutive cardiac cycles.

42. (Previously Presented) The device of claim 28, wherein the contraction of the first ventricular wall location or the second ventricular wall location is stimulated by the output module.

43. (Previously Presented) The device of claim 28, wherein the processing module and output module are implantable.

44. (Original) The device of claim 27, wherein the first ventricular wall location is at a free wall of a left ventricle and the second ventricular wall location is an anterior wall of the left ventricle.

45. (Original) The device of claim 44, wherein the anterior wall comprises the septum between the left ventricle and a right ventricle.

46. (Original) The device of claim 27, wherein the first ventricular wall location is an anterior wall of a right ventricle and the second ventricular location is a free wall of the right ventricle.

47. (Original) The device of claim 46, wherein the anterior wall comprises the septum between the right ventricle and a left ventricle.

48. (Original) The device of claim 27, wherein the first ventricular wall location is a free wall of a left ventricle and wherein the second ventricular wall location is a free wall of a right ventricle.

49. (Original) The device of claim 27, wherein the processing module is further configured to compare a third signal produced by motion of a third accelerometer located at a third ventricular wall location to the first signal or the second signal to detect a difference in synchronization of the third ventricular wall contraction and the first or second ventricular wall contraction.

50. (Original) The device of claim 49, wherein the third ventricular wall location is an anterior wall located between a right ventricle free wall and a left ventricle free wall.

51. (Original) The device of claim 50, wherein the processing module is further configured to determine, based on the detected difference between the third signal and the first or second signal, a parameter for a second stimulation pulse to be applied by an electrode located at the third ventricular wall location, and wherein the output module is further configured to apply the second stimulation pulse to the third wall location.

52. (Previously Presented) A device for synchronizing a contraction of ventricular wall locations, comprising:

a first motion sensing means configured to be located at a first ventricular wall location for producing a first signal when at the first ventricular wall location in response to contraction of the first ventricular wall location;

a second motion sensing means configured to be located at a second ventricular wall location for producing a second signal when at the second ventricular wall location in response to contraction of the second ventricular wall location;

a processing means for comparing the first signal to the second signal to detect a difference in synchronization of the first ventricular wall location contraction and the second ventricular wall location contraction; and

a stimulation means;

wherein the processing means is also for determining, based on the detected difference, a parameter for a stimulation pulse, and wherein the stimulation means is for applying the stimulation pulse to an electrode.

53. (Previously Presented) The device of claim 52, wherein the electrode is located at the first ventricular wall location to alter the first ventricular wall location contraction.

54. (Original) The device of claim 53, wherein the processing means is further configured to sense motion with the first motion sensing means and the second motion sensing means while the stimulation means applies the stimulation pulse with the parameter to again detect the difference, the stimulation means being further configured to continue application of the stimulation pulse with the parameter when an absolute value of the detected difference is less than or equal to a threshold and apply the stimulation pulse after alteration of the parameter by the processing means when the absolute value of the difference is greater than the threshold.

55. (Original) The device of claim 54, wherein the detected difference is a phase difference between the first signal and the second signal, and the threshold is non-zero.

56. (Original) The device of claim 54, wherein the processing means is configured to alter the parameter by comparing the difference detected prior to application of the stimulation pulse with the parameter to the difference detected during application of the stimulation pulse with the parameter.

57. (Original) The device of claim 53, wherein the parameter includes a timing of the stimulation pulse relative to atrial activity.

58. (Original) The device of claim 53, wherein the parameter includes a timing of the stimulation pulse relative to a timing of a second stimulation pulse.

59. (Original) The device of claim 58, wherein the stimulation means provides the second stimulation pulse to the electrode located at the second ventricular wall location.

60. (Original) The device of claim 53, wherein the first motion sensing means is located within an electrode lead associated with the electrode located at the first ventricular wall location.

61. (Original) The device of claim 60, wherein the electrode lead is located within a coronary sinus vein.

62. (Original) The device of claim 52, wherein the detected difference is a phase difference detected by the processing module comparing a time of an onset of contraction indicated by the first signal with a time of an onset of contraction indicated by the second signal.

63. (Original) The device of claim 52, wherein the detected difference is a phase difference detected by the processing module comparing a time of a peak of contraction indicated by the first signal with a time of a peak of contraction indicated by the second signal.

64. (Original) The device of claim 52, wherein the detected difference is an amplitude difference.

65. (Original) The device of claim 52, wherein the detected difference is based on an amplitude difference and a phase difference.

66. (Original) The device of claim 52, wherein the motion associated with the first signal and the second signal is sensed continuously during consecutive cardiac cycles.

67. (Original) The device of claim 52, wherein the contraction of the first ventricular wall location or the second ventricular wall location is stimulated by the stimulation means.

68. (Original) The device of claim 52, wherein the processing means and stimulation means are implantable.

69. (Original) The device of claim 52, wherein the first ventricular wall location is at a free wall of a left ventricle and the second ventricular wall location is an anterior wall of the left ventricle.

70. (Original) The device of claim 69, wherein the anterior wall comprises the septum between the left ventricle and a right ventricle.

71. (Original) The device of claim 52, wherein the first ventricular wall location is an anterior wall of a right ventricle and the second ventricular location is a free wall of the right ventricle.

72. (Original) The device of claim 71, wherein the anterior wall comprises the septum between the right ventricle and a left ventricle.

73. (Original) The device of claim 52, wherein the first ventricular wall location is a free wall of a left ventricle and wherein the second ventricular wall location is a free wall of a right ventricle.

74. (Original) The device of claim 73, wherein the processing means is further configured to compare a third signal produced by motion of a third motion sensing means located at a third ventricular wall location to the first signal or the second signal to detect a

difference in synchronization of the third ventricular wall location contraction and the first or second ventricular wall location contraction.

75. (Original) The device of claim 74, wherein the third ventricular wall location is an anterior wall located between the right ventricle free wall and the left ventricle free wall.

76. (Original) The device of claim 75, wherein the processing means is further configured to determine, based on the detected difference between the third signal and the first or second signal, a parameter for a second stimulation pulse to be applied by an electrode located at the third ventricular wall location, and wherein the stimulation means is further configured to apply the second stimulation pulse to the third wall location.